## Forestry-related measures: comments needing responses

Acronyms and comment dates:

OFIC = Oregon Forest Industries Council and Oregon Small Woodlands Association, March 20, 2014

State = ODEQ and ODLCD, March 20, 2014

Agencies = EPA and NOAA

- C1. Agencies failed to reference a specific water quality standard or standards for which additional measures are required. OFIC p.2—See IX.B
- R1. [Only temperature? Separate comment-response for this point should be developed. My guess was about temperature as it relates to the "riparian buffers" measure for N-streams, but ONLY because the responses said that Oregon had been doing TMDLs for temperature ... and TMDLs are only necessary when a waterbody is impaired, i.e., not meeting WQS. What I could not confirm from the draft response was whether those temperature TMDLs included for water bodies impaired for temperature in forested areas in the coastal zone. \*\*\* NOTE: this comment recurs for landslide-prone areas ... SOOOOO ... For EACH additional measure, we should identify the target pollutant or pollutants for which the particular additional management measure is necessary to achieve and maintain WQS ... and/or the relevant designated use to be protected.]
- C2. Only state decides whether/when additional management measures are necessary to meet WQS. Statutory reference to "as determined by the State" in (b)(1) carries forward to (b)(2) and (b)(3). OFIC p.4 See V.B
- R2. [Respond to identify where State HAS identified forestry land uses under (b)(1) and critical areas, including forested areas, under (b)(2). Then (b)(3) identification per RipStream and Sufficiency Analysis. NOTE: We can make the legal arguments we already have made, but case is stronger if we can answer on the record of what the State actually has done.]
- C3. Listings of impairments under CWA 303(d) does not mean additional measures are needed, because Northern California and Ohio list waters for sedimentation and both have approved CNPCPs. OFIC p.6. See IV.A
- R3. [The Agencies do not anticipate that even the most rigorous implementation of additional management measures will result in immediate attainment of water quality standards (for a targeted pollutant criterion and/or designated use), much less maintenance of such standards, in waters and areas adversely affected by land uses over extended periods of time.]
- C4. Finding that nonpoint forestry program is not functioning effectively, there should be scientific data to support a connection between a particular land use and "significant degradation" of water quality or designated uses. OFIC p.7. See IX.B
- R4. [Have no idea how to respond to this. Maybe lift some text from one of the historic CZARA guidance documents?]
- C5. Small but measurable impacts to water quality conditions attributable to forestry effectively recover over time. OFIC p.7 (citing RipStream and WRC). See IX.A

- R5. [Additional management measures are necessary not only to achieve WQS in waters not attaining such standards and uses, but also to maintain WQS and to protect uses.]
- C6. One of the most important factors for a program to be effective is that landowners and operators believe in and support the program. OFIC p.7 (citing Sudgen et al 2012). See IX.D
- R6. [Agencies are not directing State HOW to address the additional management measures, but THAT the State do so.]
- C7. New RipStream findings and data (Groom 2011) show wide range of responses (small increases, small decreases) in stream temperature that are order of magnitude less than responses upon which conditional approval was based. OFIC p.8. See IX.E
- R7. [The sky is still falling ... but at a decelerating rate]
- C8. Three sites with the highest increases in the RipStream study could be addressed through minor operational adjustments and do not support sweeping changes. OFIC p.7. See IX.H
- R8. [Agencies to not specify how State must address the additional management measures, but the RipSteam study does document how as few as three sites can result in pollution with significant temperature increases under the existing State program.]
- C9. Annual variation in weather and non-forestry disturbances cause greater temperature changes than forestry harvests (citing Ice and Schoenholtz), and these disturbances and variations stimulate productivity of trout and salmon populations. OFIC p.7. See IX.E
- R9. [The comment does not suggest that temperature changes due to forest harvests stimulate fish populations, or that forest harvests do not require additional management measures to reduce adverse impacts on in-stream temperatures.]
- C10. Agencies should consider the WRC studies, esp. the surprises, esp. the Alsea study showing temperature DECREASES after forest harvests in non-fish-bearing streams. OFIC p.10-11. See IX.E
- R10. [Agencies do not consider them due because of no peer review and some of the data could be due to factors not studied. Is that all we can say? We don't have merits-based responses?]
- C11. Jackson study (2001) should muted variable responses on temperature comparing headwater streams in Washington comparing buffered and no-buffer riparian harvests. Three of seven clear cuts showed NO temperature change, one cooler, one warmer, and two that were both cooler and warmer depending on monitoring location. Conclusion was that slash provided cover. Janisch 2012 study confirms. OFIC p.11.—Not sure how to address. Potentially add to IX.E? Alan, see comment in RtC
- R11. [Did the agencies ever respond re: the Jackson study in any of the back-and-forth in the 2004-2008 time period? This one seems troubling unless we have a response.]
- C12. Agencies do not indicate which water quality standards necessitate additional management measures for landslide prone areas (but presume sedimentation). OFIC p.14. See IX.I
- R12. [Agree? Sedimentation?]

- C13. Agencies do not cite to data correlating forestry-related landslides to water quality impairment. OFIC p.16. See IX.I
- R13. [Please make sure that there are copies in the administrative record of the studies cited in the Findings Document, esp. the ones in footnotes 27-35]
- C14. Challenging Agencies' assertion that inventory and reporting is necessary to document legacy roads are not a problem, OFIC cites to Oregon FWS data (2011) indicating that, since 1997, habitat conditions have been stable to improving, and increasing returns of coastal coho salmon. Also, no data exists (or is required to be gathered re: legacy roads?) to demonstrate that Washington State coastal water quality and habitat have improved as a result of Washington CNPCP. OFIC p.18.—not sure not to address. Potentially add to IX.J?
- R14. [????]
- C15. Forest practices have changed since 1998 re: aerial application of pesticides, specifically ultracourse sprayers, so Agencies' data is old and does not support additional measure as necessary to meet WQS. OFIC p. 19. See IX.L
- R15. [Was there ANYTHING cited as a technical basis that post-dates the conditional approval (1998) in the NMFS BiOp on 2-4D? Findings document at p.18 cites to a 60 foot buffer for non-fish-bearing streams, but there does not seem to be ANYTHING that we are citing to rebut the argument that the 60 buffer requirement (adoption year unknown) should be sufficient because of the change in drop size. The data we do cite is about detections of these pesticides that are attributed to urban storm water, not forestry.]
- C16. The biologically based numeric criteria of the temperature water quality standard are being met with current forestry practices. State p.11. See IX.B

R16.

- C17. Though not finished with RipStream recommendations, the Forestry Board completed implementation of the recommendations from the Sufficiency Analysis, as well as the IMST, by adopting rules in 2007 (implying Sufficiency Analysis and IMST should not be basis for finding of failure by the State). State p.12. See IX.A
- R17. [Uh oh. Need some clarity here. Do EPA/NOAA agree that the Forestry Board completed the recommendations from the Sufficiency Analysis and IMST? If not, then need to identify which recommendations remain problematic because those are two of the three things upon which we have been hanging our hat.]
- C18. The process for EQC to petition BOF, plus other administrative measures and processes under State law, effectively satisfy the requirements of 6217(b)(3). State p.12. [NOTE: They don't argue this directly or precisely, but they have enough there to indicate they have presented the argument.] See IX.B (actually new "C")
- R18. [Something about how the Agencies identified continuing revision and implementation of management measures to be an unmet condition in the 1998 Conditional Approval, see esp. p.16 of the Conditional Approval document. PLEASE CONFIRM that the Agencies have not issued an INTERIM

APPROVAL on the "continuing revision and implementation" condition since 1998. If we have just been silent since then, then say that we identified it as a problem in 1998 and that it persists today as evidence that the additional management measures for forestry and forested lands have not been satisfied.]

- C19. The WRS studies, esp. the Trask paired watershed study, as well as the Hinkle study, demonstrate that Oregon's program (including the part administered by BOF and ODF) provide for "continuing revision and implementation" as necessary to achieve and maintain WQS, esp. as it relates to riparian buffers for non-fish-bearing streams. State pp. 14-15. [NOTE: Same as above ... they don't come out and say this directly/precisely, but there is enough here for them to present this as legal argument.] See IX.B (new "C")
- R19. [Something about timeliness maybe? Disconnection between water quality impairments and actions by forestry agencies? Historical record of EQC not petitioning?]
- C20. Oregon disagrees with federal Agencies technical/scientific claims correlating harvesting activities with landslide rates, and argues that science/evidence/research show "significant dependence on geological setting, storm size event, and other non-human factors" (citing wet weather haul study, I think ... three year study in 1999?) State p.15. Oregon also says that ODF responded appropriately based on the study with regulatory amendments in 2003. State p.15. See IX.I
- R20. [?? Not sure how to respond ... control the things that can be controlled and that are attributable to human activity in recognition that "background" landslides cannot be avoided maybe?]
- C21. Something something weird about how model estimated "contemporary" landslide rate was 3-9 times the estimated background. State p.16.—not sure we need to response to this? Unsure how we would if we do?
- R21. [Doesn't this mean that their own data demonstrates a correlation (3-9 times) the landslide rate attributable to harvesting? Need to dig deeper to see what they mean by "contemporary landslide" rate.]
- C22. Citation to Turner et al (2010) documenting that landslides are heavily influenced by rainfalls, slopes, stand age, etc. State p. 16. not sure we need to response to this? Unsure how we would if we do?
- R22. [I can't tell whether or how Turned et al even evaluated the influence of harvests, e.g., by comparing "control" locations for any given year.]
- C23. Cataloging the rulemaking actions taken by BOF/ODF since 1998, presumably to respond to the additional management measure condition. State pp.16-17. See IX.I
- R23. [At first blush, it looks like the State HAS taken what appear to be serious regulatory measures. I'm hard pressed to figure out, based on what the Agencies identified in terms of THIS condition in 1998, what remains as the gap between what the Agencies said the State needed to do and what the State has done since then. Maybe the point is that, in the final findings document, the Agencies acknowledge and credit the BOF/ODF for the rulemaking that has been undertaken since 1998, but that, in the coastal range, there is a higher concentration of steep sloped areas than in-land areas and that harvests are still permitted on in HRHAs without adequate controls in the absence of a risk to public safety. What I don't

understand is how the Agencies would evaluate the adequacy of further controls. I just think we need a separate response to this comment. It may end up being a cut-and-paste from the findings document if that is all that we can say right now.]

- C24. Oregon FPA distinguishes between forest roads that are: active, inactive, and vacated. Inactive roads must be maintained unless and until vacated.—not sure we need to respond to this?
- R24. [In the parlance of the Oregon FPA, the condition applicable to "legacy roads" applies to vacated roads and measures applicable to "vacated" roads, including those vacated prior to enactment of the FPA rules that apply when a road is deemed "vacated".]
- C25. Available data indicates that, notwithstanding the inapplicability of aerial overspray buffers to non-fish-bearing streams, only one forestry use pesticide (glyphosate) was detected and all measured concentrations were below level currently applicable for protection of aquatic life (citing 2011 NMFS BiOp setting max limit for 2,4-D).— See IX.J

R26.